Philips
LCD widescreen monitor

22" wide
WSXGA+

220TW9FB

Digital HD-TV monitor in a stylish package

Combine work and entertainment with this widescreen multi-function monitor! With a large, wide viewing area, TV, video and HDMI input plus built-in speakers, the Philips 220TW9 boosts your productivity and brings you ultimate enjoyment.

Outstanding front of screen performance
- Crystal Clear III for natural images with enhanced quality
- HD LCD display, with a 1680 x 1050p resolution
- HD Ready for the highest quality display of HD signals
- 5ms fast response time

Great convenience
- Built-in TV tuner for viewing TV programs on your PC monitor
- 2 HDMI inputs for full digital HD connection in one cable
- EasyLink: easy control of TV & connected device via HDMI CEC
- Smart mode selects a perfect mode for what you are watching
- Easy-to-use remote control included

For advanced performance
- Incredible Surround for enhanced audio enjoyment

Ready for digital
- Integrated Digital Tuner for DVB-T reception

PHILIPS
sense and simplicity

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Specifications

Accessories
- Included Accessories: Batteries for remote control, Power cord, Quick start guide, Remote Control, Table top stand, User Manual, Warranty certificate

Connectivity
- Ext 1 Scart: Audio L/R, CVBS in/out, RGB
- Ext 2: Audio L/R in, CVBS in, S-video in
- Ext 3: Audio L/R in, YPbPr
- HDMI 1: HDMI v1.3
- HDMI 2: HDMI v1.3
- HDMI-control (CEC features): One touch play, System standby
- Other connections: Common Interface, Headphone out, PC Audio in, PC-In VGA, S/PDIF out (coaxial)

Convenience
- Clock: Sleep Timer, Start timer, Stop timer
- Connection Enhancement: Easy link
- Ease of Installation: Auto Program Naming, Automatic Channel Install(ACI), Automatic Tuning System (ATS), Fine Tuning, PLL Digital Tuning, Plug & Play
- Ease of Use: Auto Volume Leveller (AVL), On Screen Display, Program List, Side Control
- Electronic Program Guide: 8 day Electronic Program Guide, Now + Next EPG
- Picture in Picture: Text dual screen
- Remote Control: TV
- Remote control type: RCPF05E08B
- Screen Format Adjustments: 4:3, Movie expand 14:9, Movie expand 16:9, Subtitle Zoom, Super Zoom, Widescreen
- Smart mode: Movie, Personal, Power saver, Standard, Vivid
- Teletext: 100 page Smart Text

Dimensions
- Box dimensions (W x H x D): 580 x 510 x 137 mm
- Product weight: 5.5 kg
- Product weight (+stand): 6 kg
- Set dimensions (W x H x D): 534 x 397 x 71 mm
- Set dimensions with stand (W x H x D): 534 x 442 x 181 mm
- VESA wall mount compatible: 100 x 100 mm
- Weight incl. Packaging: 7.77 kg

Picture/Display
- Aspect ratio: Widescreen
- Brightness: 300 cd/m²
- Contrast ratio (typical): 1000:1
- Diagonal screen size: 22 inch / 56 cm
- Display screen type: LCD WSXGA Active Matrix TFT
- Panel resolution: 1680 x 1050p
- Picture enhancement: 2D Combfilter, 3/2 - 2/2 motion pull down, Crystal Clear III, Progressive Scan, Smart Picture, White stretch
- Response time (typical): 5 ms
- Screen enhancement: Anti-Reflection coated screen
- Viewing angle: 170° (H) / 160° (V)

Power
- Ambient temperature: 5 °C to 35 °C
- Mains power: 100-240V, 50/60Hz
- Power consumption: 55 W
- Standby power consumption: <0.3 W

Sound
- Output power (RMS): 2 x 5W
- Sound Enhancement: Auto Volume Leveller, Incredible Surround, Smart Sound
- Sound System: Mono, Stereo

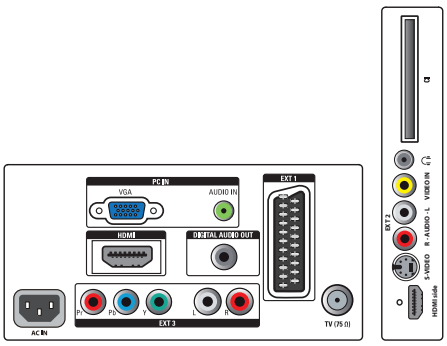
Supported Display Resolution
- Computer formats

Resolution	Refresh rate
1024 x 768	60Hz
1280 x 1024	60Hz
1440 x 900	50Hz, 75Hz
1680 x 1050	50Hz, 60Hz
640 x 480	60Hz
800 x 600	60Hz

- Video formats

Resolution	Refresh rate
1080i	50, 60Hz
480i	60Hz
480p	60Hz
576i	50Hz
576p	50Hz
720p	50, 60Hz

Tuner/Reception/Transmission
- Aerial Input: 75 ohm coaxial (IEC75)
- DVB: DVB Terrestrial *
- Tuner bands: Hyperband, S-Channel, UHF, VHF
- Tuner Display: PLL
- TV system: PAL B/G, PAL D/K, PAL I, SECAM B/G, SECAM D/K, SECAM L/L'
- Video Playback: NTSC, PAL, SECAM



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Product highlights

Crystal Clear III
Crystal Clear III combines a whole range of enhancements to provide a better picture. They include a 2D Comb filter, Dynamic contrast, Blue stretch and Green enhancement so that you always get the most natural looking colors.

Built-in TV tuner
A television tuner built into a monitor to display television signals as well as computer data.

HD Ready
Enjoy the exceptional picture quality of High Definition pictures and be fully prepared for HD sources like HDTV settop box or Blu-ray disc. HD Ready is a protected label that offers picture quality beyond that of progressive scan. It conforms to strict standards laid out by EICTA to offer a HD screen that displays the benefits of resolution and picture quality of a High Definition signal. It has a universal connection for both analog YPbPr and uncompressed Digital connection of DVI or HDMI, supporting HDCP. It can display 720p, and 1080i signals at 50 and 60Hz.

5ms on/off response time
On-Off response time is the period required for a liquid crystal cell to go from active (black) to inactive (white) and back to active (black) again. It is measured in milliseconds. Faster is better: Lower response time means faster transitions and, therefore, results in fewer visible image artifacts in the display of transition of texts and graphics. On-Off response time is a more important measure in the display of business content like documents, graphs and photos.

2 HDMI inputs
HDMI makes an uncompressed digital RGB connection from the source to the screen for the ultimate picture quality. HDMI intelligently communicates the highest output resolution with the source device. The HDMI input is fully backward compatible with DVI sources and includes digital audio. HDMI uses HDCP copy protection. With one HDMI inputs on the back and one HDMI on the side of the TV you can connect multiple HD sources, for instance an HD settop box, a Blu-ray player, and game console or digital Camcorder. Your TV is fully prepared for the HD future.

EasyLink
EasyLink uses the HDMI CEC industry standard protocol to share functionality between connected devices and the TV. With EasyLink only one remote control is needed to operate main functionalities on your TV and connected devices. EasyLink uses the standard HDMI cable to transfer system commands. It works between all electronic devices equipped with HDMI CEC.

Smart mode
The optimum picture and sound depends on various aspects like the video source, content type, surroundings of the room, type of display device etc. Smart Mode has predefined picture and sound settings conveniently preset by the way you use your TV. The 'Personal' setting, allows you to define the picture settings according to your preference, store it and gain easy access for future selection. All these conveniently built into your TV for optimal settings.

Incredible Surround
Incredible Surround is an audio technology from Philips that dramatically magnifies the sound field to immerse you in the audio. Using state-of-the-art electronic phase shifting, Incredible Surround mixes sounds from left and right in such a way that it expands the virtual distance between the two speakers. This wider spread greatly enhances the stereo effect and creates a more natural sound dimension. Incredible Surround allows you to experience total surround with greater depth and width of sound, without the use of additional speakers.

Issue date 2008-11-15

Version: 1.0.3

12 NC: 8670 000 42453
EAN: 87 12581 44518 8

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